IMPROVING INFORMATION TECHNOLOGY SKILLS: VISION BECOMING REALITY

3rd Annual Clinger-Cohen Act IT Skills Report

A REPORT TO THE SECRETARY
OF THE TREASURY
DECEMBER 2001

Chief Information Officer
Office of Business Practices
Information Technology Workforce Improvement Program

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Executive Summary

The IT Workforce Improvement Program has become institutionalized. The Program Office develops an annual work plan that is funded by the bureaus. Significant strides have been made in training and development. Enrollments at the National Defense University's IRM College increased 375% over the past three years. Many bureaus have met the target to spend 3% of IT salary dollars on training for their IT workforce.

Treasury has continued to play a major role in government-wide IT workforce activities. The IT Workforce Improvement Program Manager is an active member of the Federal CIO Council's Workforce and Human Capital for IT Committee and leads the High School Outreach Team. Treasury's Assistant Director for Customer Service Consulting is the government task manager for the National Academy of Public Administration (NAPA) study of IT compensation systems.

There has been an exciting and significant emphasis on human capital initiatives in the Federal Government over the past year. Several major reports were released and Congressional legislation is being proposed to reform compensation and benefits for the IT workforce. GAO placed human capital management on its high-risk list. New Civil Service personnel flexibilities are being proposed by the Administration.

As the federal workforce moves closer to retirement age, Treasury's IT workforce is following suit. Seventy-five percent of the IT workforce is over age 40, with 34% over age 50; and twenty-five percent of the IT workforce is under age 40, with 2% under age 30. The average age of the Treasury IT worker is 45.6. Retirement eligibility projections for IT positions will nearly triple from 2002 to 2008. In 2008, several bureaus show a retirement eligibility rate surpassing 40%. Not all employees eligible to retire, will retire at that time, but the potential is there.

Due to this scenario, Treasury must enhance its succession planning efforts to ensure that the IT community employs individuals with the right skills at all levels. A primary facet of this effort should be a move toward the development of recruitment initiatives and tactics for strategic hiring based on anticipated retirements in the next several years.

The environment is right for sweeping changes to occur in IT compensation and personnel reform. We need to take advantage of the momentum and act on new initiatives to bring the Treasury IT workforce to the highest level of performance – a world-class organization.

Chapter 1 – Treasury's Information Technology Workforce Improvement Program

The Treasury IT Workforce Improvement Program (ITWIP) has continued to strive toward the development of strategies for effective agency-wide recruitment, development and retention. The Program Office was created in 1998 to respond to the requirements of the Clinger-Cohen Act.

1.1 The Clinger-Cohen Act
Section 5125(c)(3) of the Clinger-Cohen Act requires the CIO to provide an annual report to the head of the agency which addresses progress on the following mandate:

 (3) annually, as part of the strategic planning and performance evaluation process required (subject to section 117 of title 31, United States Code) under section 306 of title 5, United States Code, and sections 1105(a)(29), 1115, 1116, 1117, and 9703 of title 31, United States Code–

 (A) assess the requirements established for agency personnel regarding knowledge and skill in information resources management and the adequacy of such requirements for facilitating the achievement of the performance goals established for information resources management;
 (B) assess the extent to which the positions and personnel at the executive level of the agency and the positions and personnel at the management level of the agency below the executive level meet those requirements;
 (C) in order to rectify any deficiency in meeting those requirements, develop strategies and specific plans for hiring, training, and professional development; and
 (D) report to the head of the agency on the progress made in improving information resources management capability.

1.2 The IT Workforce Improvement Program Agenda
The IT Workforce Improvement Program has developed a set of key values and a mission statement for carrying out its strategic plan.

1.3 Values and Mission

Values
➢ Human capital is a key organizational asset
➢ Human capital is valued

Mission
➢ Provide added value to bureaus by enabling economy of scale in recruitment and development initiatives
➢ Advocate for best practices in human capital management in Treasury and the Federal community

1.4 Strategic Plan of Action

➢ Provide leadership in Treasury and the Federal community
• Develop strategies for recruitment, development, and retention
• Chair Treasury IT Skills and Federal CIO Council's High School Outreach Subcommittees, advocate for Treasury
• Share workforce information

➢ Nurture/develop a skilled workforce
• Negotiation for volume discounts and coordination of training programs such as IRM College, IRS Distance Learning
• Investigate new avenues of training

➢ Provide a desirable work environment for IT employees
• Survey current recruitment/retention flexibilities and inventory best practices
• Consider new initiatives such as Federal Student Loan repayment
• Develop consistent approach for Treasury

➢ Attract New Talent
• Tap into resources available in the disabled community
• Explore pipelines for recruiting and retaining top IT talent

1.5 Budget

The Department funds one staff year under the Salaries & Expense account to support the strategy and policy activities of the IT Workforce Improvement Program (ITWIP). This involves representation of the program to the Federal CIO Council, the OPM and to other third parties. The rest of the program is funded through the Working Capital Fund. Bureaus fund a percentage of the total program expenses based on the number of IT employees in a bureau. Since the program benefits the IT workforce, it is appropriate that the shared cost is on a per capita basis.

ITWIP is an enterprise effort for the benefit of CIO organizations in each bureau in the Department. The IT Workforce Program includes both policy and service initiatives. It includes legislatively mandated functions of the CIO, activities that are cooperatively undertaken Department-wide and serve the interests of all bureaus, and initiatives that only serve the needs of specific bureaus and are targeted to their needs. An overriding purpose of the program is to provide enterprise-wide benefit through economy of scale, in order to maximize efficiency for the Department and to minimize costs.

The IT Workforce Improvement Program consists of many diversified, on-going components that will be measured individually as described in the ITWIP organizational scorecard. Treasury is impacted by certain Executive Orders, OPM/OMB directives, and by legislation some of which may contain corresponding performance requirements. Treasury is measured by compliance to these directives. Overall measurement of the program is provided by the data in the Annual Reports to the Secretary of the Treasury as directed in the Clinger-Cohen Act. In general, the program is measured by advantages gained by economies of scale and savings to individual bureaus by consolidating program costs. In addition, studies have shown that a higher training investment leads to better recruitment, higher retention rates, and a more satisfied and productive staff.

1.6 FY 2002 Budget Initiatives

Budget initiatives for FY 2002 are shown in the table following this page. These initiatives were presented to and approved by the Treasury CIOs and their staff members on the IT Skills Enhancement Subcommittee.

These activities form the program for IT Workforce Improvement. As in the past, Treasury will continue to take a leadership role in the Federal community, serving on the Federal CIO Council's Workforce and Human Capital for IT Committee, leading the High School Outreach effort. We will continue to provide development opportunities to maintain and improve skills through training with the IRM College, Information Management Forum, and ESI, International. We will continue with presentation of an IT track at TEI to provide training for both IT and non-IT executives and will pursue a Treasury-wide E Learning effort to achieve economies of scale.

Working toward the goal of providing the most desirable work environment for Treasury's IT employees, we look forward to implementing various provisions of the NAPA strategy for compensation and development. (Chapter 2 has a full discussion of the NAPA Study.) We will focus on guidelines for new potential employee benefits, such as the use of the Federal Student Loan Repayment Program.

We will strive to produce effective pipelines to bring new talent into the agency, focusing on non-traditional labor pools such as the disabled community. We seek to continue successful awareness programs such as Job Shadow days and internships to interest students in the pursuit of IT careers.

IT Workforce Improvement Program
FY 2002 Budget Initiatives

Initiative	Description	Benefit/Use
Essential Activities		
Department Provided	• Department-wide strategy/guidance • Chair of Treasury IT Skills Enhancement Subcommittee • Represent Treasury at Government-wide forums • Chair, High School Outreach, Fed. CIO Council Workforce Committee	• No cost to bureaus • Monthly meetings for planning and implementation of program initiatives • Consistent approach • Presented to Justice Dept, Fed-Web Conference, IT Conference, NIGI in June – provides exposure and influence for Treasury
Disabled Opportunity Program	• Tap into resources available in disabled community • Pool of disabled candidates available to all Treasury bureaus	• Consolidated Treasury program • Meets goals of Presidential Directive • Excellent, untapped resource • Reliable mechanism to fill positions
Employee Benefit Package	• Survey current recruitment/retention flexibilities • Inventory best practices • Identify new programs such as Federal Student Loan Repayment	• Package created, market to HR • Takes advantage of new OPM/NAPA initiatives • Consistent approach throughout Treasury • Contributes to more successful recruitment • Focus on retention strengthens workforce
ESI Project Mgmt Training	• Contract offers substantial discounts to bureaus • Marketing effort needed	• Bureaus receive discounts of 30% off standard prices • Customs/BPD have made significant use of contract – saving thousands in tuition/travel • Project Management is an essential skill
Federal CIO Workforce and Human Capital for IT Committee	• Treasury has been a key member for 3 years, active involvement	• First notice on Council activities relating to workforce • Bureaus gain valuable information • Treasury contribution to key government initiatives, i.e., Special Pay, GS2200 Series, NAPA Study
High School Outreach	• Supports Shadow Day and summer internships	• Pipeline for bringing IT talent to the Federal workforce • Leadership initiative of the Federal CIO Council • Community involvement
Information Management Forum	• Private sector discussion forum • IT managers share technical challenges and accomplishments	• Excellent opportunity to network, share best practices, solutions • Bureaus only pay for travel

IT Workforce Improvement Program
FY 2002 Budget Initiatives

Initiative	Description	Benefit/Use
Essential Activities	(continued)	
Intranet/ Internet	• Vehicles to publish ITWIP program information • Internet is operational, content must be updated. • Intranet must be developed • Link for all of Treasury	• Provides information on a broad scale to public and all of Treasury • Treasury recognized as leader, Internet site has averaged 1,000 hits per month • Intranet will impart critical IT workforce training, recruitment, and development information to all of Treasury
IRM College	• Negotiation of agreement • Registration and coordination for program	• Agreement negotiated- provides 13% discount on Intensive classes and guaranteed number of slots in AMP courses • Enrollment increased from 89 in FY2000 to 280 in FY 2001 • Very popular program, excellent training • Streamlined registration for bureaus
IRS Distance Learning	• Coordination of bureau requirements • Treasury Intranet link	• Online training for every bureau, can save thousands per year in training costs • Access to over 600 classes • Over 100 employees currently using • IRS financed, service currently free to bureaus
Secretary's Annual Report	• Coordination/collection of information, write/publish report • Clinger-Cohen requires an annual assessment	• Treasury has a consolidated, comprehensive picture of its IT workforce • Valuable reference used by HR/bureau IT staffs/other agencies
Senior IT Management Assessment	• Conduct on-line assessment of Clinger-Cohen core competencies of senior IT managers • Initial assessment conducted, follow-up needed	• Economy of scale • Medium and small bureaus could not do on own • Determine competency levels of IT leadership
TEI IT Track	• Continue collaborating with TEI to produce 2 to 3 IT Track sessions per year	• Popular sessions, valuable to educate both IT and non-IT executives (100% subscribed, SRO- in 7 sessions so far) • Contract costs borne by TEI • Another avenue for executive/mid-level training

Chapter 2 – Current IT Workforce Environment

2.1 Recent Studies
Over the past year, there has been a proliferation of studies and reports on the federal workforce crisis. Issues, which have been discussed for the past few years, are now receiving national attention. First and foremost, the National Academy of Public Administration (NAPA) just completed its nearly year-long study to "assess the current state of the federal government information technology workforce as it compares to pay systems in the private sector and in other public sector organizations." This critical study, sponsored by the Federal CIO Council and US Courts, highlights the significant factors in developing a compensation system that is needed to alleviate the crisis. If these recommendations are followed, the federal government will be able to "improve its competitive position in the war for talent."

In January 2001, the General Accounting Office added the human capital issue to its "high risk" list of major management challenges. The Report on "Major Management Challenges and Program Risks: A Government Perspective," addresses "the urgent need to revamp the federal government's entire strategic approach to human capital (people) management before the erosion of government's capacity to perform more dramatically undermines agencies' abilities to efficiently and effectively serve the American people." David Walker, the Comptroller General of the US and Senator George Voinovich have been exceedingly vocal in stressing the need to value human capital. These efforts and others will be briefly discussed considering the relation and impact to the Treasury IT Workforce Improvement Program.

2.2 NAPA's "The Transforming Power of Information Technology – Making the Federal Government an Employer of Choice for IT Employees"
This study was released in September 2001 at GSA's annual IRMCO (Information Resources Management) Conference. NAPA staff conducted the research and analysis for the report. Findings and conclusions were debated and discussed by a CIO Council sponsored Project Leadership Committee with executive CIO, human resources, finance, and private sector participation. Final NAPA recommendations were determined by an independent, nonpartisan panel of NAPA fellows with substantial public and private sector experience. Treasury's Deputy Assistant Secretary for Human Resources (HR) was a representative on the Project Leadership Committee.

In Treasury's office of the Deputy Assistant Secretary for Information Systems, the Assistant Director for Customer Service Consulting represented the Federal CIO Council in various discussions and briefings as the government task manager for the NAPA IT pay study. These meetings included briefings with the OPM Director's Chief of Staff, GAO, and the CFO Financial Systems Subcommittee. Congressman Tom Davis initiated legislation to establish a pay-for-performance system for IT employees based in part on the NAPA study. OPM indicated that the themes of the report complement the President's management agenda and is encouraging cooperation between OPM, NAPA and the CIO Council in developing more specific proposals to implement the NAPA recommendations.

The NAPA report advocates the establishment of a market-based, pay-for-performance system. It calls for moving professional IT employees from the current GS and SES pay schedules with 105 defined pay levels into four broad pay bands. An individual's pay within these bands would be based upon a combination of market surveys of pay levels for his or her skills and measures of his or her individual contribution to mission accomplishment. NAPA proposes abolishing annual across-the-board pay increases and step increases based upon longevity. The proposal would also allow for separate and equally compensated career tracks for IT managers and technical specialists. The need for substantially increased attention and investment in skill development and training is also highlighted. Finally, it calls for a transition from the current system to this new approach which allows current employees to opt into the new system while all new hires would be automatically covered by it. The study recognizes that the introduction of basic changes in pay, rewards and benefits structures requires substantial cultural change and the proposal envisions significant front-end investment to create that change. The report contains a cost-benefit analysis that demonstrates that there would be long term savings and improved performance through its recommendations.

2.3 David Walker's Campaign to Value Human Capital
David Walker, the Comptroller General of the United States, has been a strong advocate for valuing human capital. GAO has released a number of reports addressing human capital issues including the practical guide "Human Capital: A Self-assessment Checklist for Agency Leaders." In GAO-01-965T (July 2001) entitled "Human Capital: Taking Steps to Meet Current and Emerging Human Capital Challenges," Walker states "we believe that every agency should begin assessing its own human capital situation and pursue adoption of prevailing best practices." He goes on to state "agency leaders must commit their organizations to valuing and investing in their employees and focussing their employees' efforts on achieving agency missions and goals. The essential ingredients for progress in this area are leadership, vision, commitment, persistence, communication, and accountability."

In testimony before the Subcommittee on Technology and Procurement Policy, Committee on Government Reform, US House of Representatives, David Walker discussed "Building the Information Technology Workforce to Achieve Results." Mr. Walker states that the federal government faces pervasive human capital challenges that erode the ability of many agencies to perform their missions. He goes on to conclude that "how successfully the federal government acquires and uses information technology will continue to hinge on its ability to build, prepare and manage its information technology workforce. However, agencies must overcome two basic challenges related to IT human capital: a shortage of skilled workers and the need to provide a broad range of related staff training and development. These are essential challenges to address…."

2.4 Senator George Voinovich's "Report to the President: The Crisis in Human Capital"
In December 2000, Senator George Voinovich, Chairman of the Senate Subcommittee on Oversight of Government Management, released a report to the President outlining the

state of the federal government's human capital crisis. This compelling report describes the nature of the crisis and outlines recommendations for reform in workforce planning, training, compensation, improvement to federal hiring systems and more. Senator Voinovich pledged that he will devote a great effort through his work as chair of the Senate Governmental Affairs Committee's Oversight of Government Management Subcommittee to ensure that the human capital crisis is recognized and acted upon. At the Excellence in Government Conference in August 2001, Voinovich called for recognition and respect for federal workers, integration of human capital requirements in agency strategic plans, and for the establishment of a separate line item for training and development in agency budgets.

In October 2001, Senator Voinovich introduced Senate bill S.1603, the Federal Human Capital Act of 2001. The Act establishes chief human capital officers in the major agencies and includes provisions relating to metrics for human capital, reform of the competitive service hiring process, reform of the Senior Executive Service, and reforms relating to Federal employee career development and benefits.

2.5 NRC's "Building a Workforce for the Information Economy"
The National Research Council produced a comprehensive report in early 2001 on the state of the nation's IT workforce. This study concluded that the "labor market for IT positions is tight and likely to remain so for the immediate future, barring dramatic change." The committee believes that there is no single solution that would provide relief and that many stakeholders are involved. The report provides recommendations for employers, employees, educational institutions and government at all levels.

In particular, the report discusses the IT workforce issues in the federal government. It quotes Treasury statistics noted in the "Responding to the Crisis in IT Skills," painting the picture of few hires from outside government and illustrating the average age of our IT employee as 44 years. The report also acknowledges IRS' use of retention incentives for programmers during Y2K. Treasury's testimony at an NRC hearing provided significant feedback to the research group.

The report provides recommendations for the federal government's IT worker shortage. Specifically the committee states that agencies should:

1. Emphasize the fulfillment that comes from working in responsible positions serving the nation.
2. Be more flexible in remuneration and recruiting methods.
3. Improve working conditions.
4. Make more resources available for training.
5. Use contractors more effectively
6. Support a next generation of federal IT workers.

Recommendations for both federal and state government include promoting awareness of and interest in IT careers and to expand opportunities for groups underrepresented in IT.

2.6 ITAA's Annual Study
The Information Technology Association of America published its annual study on the IT workforce in April 2001. The study is titled "When Can You Start? Building Better Information Technology Skills and Careers." The report concludes that the demand for IT workers is still substantial, even though that demand has diminished from the past year, due to the decline in the tech sector. An expected shortfall of 425,000 IT workers is projected. The study also found that non-IT companies are the largest employer of IT workers. The hottest skill area was technical support, and managers felt that candidates with four-year college degrees assured the best fit for four out of eight job categories: database development/administration, enterprise systems, programming/software engineering and technical writing. Technical school experience was deemed best for gaining expertise in network design/administration and digital media. Industry or vendor certification programs were considered of moderate importance to managers.

2.7 OPM - Individual Learning Account Study
The Federal Training Technology Task Force, established in 1999 by Executive Order 13111, "Using Technology to Improve Training Opportunities for Federal Government Employees," initiated a pilot test to investigate the use of Individual Learning Accounts (ILAs) in the Federal Government. The agencies participating in the pilot strongly recommended the implementation of ILA's. OPM endorses the recommendations to 1) implement ILAs government-wide; 2) to develop guidance for implementation of ILAs; and 3) to promote the use of ILAs and to support the effort with consultation and networking.

Chapter 3 – Treasury IT Workforce Picture

3.1 Federal IT Workforce View

The work of the federal government is becoming increasingly dependent on information technology. Almost every single government process is in some way based on technology. Investment in technology is expected to account for 40% of all capital investments in 2004. This situation, combined with the shortage of skilled IT workers, exacerbates our impending workforce crisis. As David Walker points out "having enough of the right people with the right skills will make the difference between success and failure – particularly in the area of technology." The Bureau of Labor Statistics predicts the demand for computer systems analysts, engineers and scientists will come close to doubling in the ten years from 1998 to 2008. In addition, with a potential increase in agencies contracting for even more IT services, project management and contract management skills will become paramount.

The influence of electronic government is also a huge factor. Investment in E-Government technology for the federal, state and local sectors is expected to rise steadily from 2 billion dollars in FY 2001 to 6 billion dollars in FY 2005.

The overall federal government's workforce picture is not good. About 31% of the employees in the 24 major departments and agencies working in 1998, will be eligible to retire in 2006. SES government-wide retirement eligibility rates will rise steadily from 30% in FY 1999 to about 65% in FY 2005.

According to the forecast for information technology from GAO (from Civilian Personnel Data File data), in FY 2006, government-wide:

30% of Computer Specialists will be eligible to retire, and 14% are estimated to retire
38% of Telecom Specialists will be eligible to retire, and 20% are estimated to retire
53% of Program Managers will be eligible to retire, and 30% are estimated to retire

3.2 Treasury's IT Workforce Picture
Treasury's similar increase in its information technology investment, and a push toward electronic government will be a determining factor in shaping its IT workforce of the future, with a corresponding need for more project and contract managers.

Treasury's IT workforce picture has not changed radically over the past few years. Seventy-five percent of the IT workforce is over age 40, with 34% over age 50; and twenty-five percent of the IT workforce is under age 40, with 2% under age 30. The average age of the Treasury IT worker is 45.6. Similar to government-wide statistics, the Department also faces a retirement bubble over the next several years. Effective succession planning requires that we employ individuals who possess the right skills to carry on IT programs and that there is an appropriate distribution of workers at all levels (entry, intermediate, full-performance, senior expert, and executive).

The educational level of IT employees has remained steady, about 10% of employees have attained a Bachelor's Degree in Computer and Information Sciences. About 29% of employees have a non-IT Bachelor's Degree.

Retirement eligibility projections as shown in Figure 1, indicate that for series 334, 391 and 1550, we will see a steady rise from 2002 to 2008. In 2008, several bureaus show a retirement eligibility rate surpassing 40%. Not all employees eligible to retire will retire at that time, but the potential is there.

Figure 1: Treasury Employee's Retirement Eligibility by Bureau

Bureau	Series	Current IT Population	30-Sep-02		30-Sep-04		30-Sep-06		30-Sep-08	
ATF	334/391	115	8.7%	10	17.4%	20	20.9%	24	33.9%	39
BEP	334/391	48	10.4%	5	12.5%	6	22.9%	11	35.4%	17
BPD	334/391	259	9.7%	25	15.1%	39	19.3%	50	26.6%	69
DO	334/391/1550	121	22.3%	27	31.4%	38	44.6%	54	52.1%	63
FINCen	334/391	17	0	0	0	0	11.8%	2	11.8%	2
FLETC	334/391	23	4.3%	1	8.7%	2	17.4%	4	30.4%	7
FMS	334/391/1550	387	19.9%	77	28.9%	112	37.0%	143	46.0%	178
IRS	334/391/1550	5392	13.5%	730	20.6%	1111	29.0%	1566	37.7%	2034
MINT	334/391	73	6.8%	5	15.1%	11	19.2%	14	24.7%	18
OCC	334/391	136	13.2%	18	22.8%	31	30.9%	42	41.9%	57
OIG	334/391	9	11.1%	1	11.1%	1	22.2%	2	22.2%	2
TIGTA	334/391	79	6.3%	5	11.4%	9	20.3%	16	34.2%	27
USCS	334/391/1550	371	17.3%	64	26.1%	97	32.9%	122	40.2%	149
USSS	334/391	140	15.0%	21	22.1%	31	31.4%	44	31.4%	44
Average Percent of Eligibility			**11.3%**		**17.4%**		**25.7%**		**33.5%**	

Chapter 4 – Provide Leadership

4.1 Treasury's IT Skills Enhancement Subcommittee

The IT Skills Enhancement Subcommittee established on March 25, 1997, to comply with Clinger-Cohen legislation, meets monthly to actively develop and implement strategies and plans for recruitment, retention and development for Treasury CIO organizations. The Subcommittee has representation from each bureau CIO in the Department. Through the tremendous efforts of this Subcommittee, significant opportunities for development were made available to the entire Treasury IT workforce. Discussion of these activities occurs in subsequent chapters of this report.

4.2 CIO Workforce and Human Capital for IT Committee

The Federal CIO Council established the CIO Workforce and Human Capital for IT Committee to "validate and substantiate the extent of the federal IT workforce challenge"; and to "develop and implement strategies for recruitment, retention, and development of information technology professionals and upgrade skills of {the} current workforce." Treasury continues to play a large role in the activities of the committee. The IT Workforce Improvement Program Manager is an active participant on the committee to review and revise the Clinger-Cohen core Competencies used as a baseline by agencies to determine the skills and knowledge that make a CIO organization successful. In addition, Treasury's Assistant Director for Customer Service Consulting was the government task manager for the National Academy of Public Administration (NAPA) study of IT compensation systems.

The Committee's latest report on the Federal IT Workforce Challenge is available on the CIO Council's web-site, www.cio.gov. The "2001 Update of the Plan for Implementing the Federal IT Workforce Challenge Recommendations" notes significant accomplishments in the areas of workforce planning and management, recruitment and retention, and career development. It also outlines initiatives for future consideration and showcases industry and government best practices.

4.3 High School Outreach

The IT Workforce Improvement Program Manager is the chair of the Workforce and Human Capital for IT Committee's High School Outreach Team. The High School Outreach team (HOT-IT) was created in October of 2000 to promote high school students' interest and preparation for IT careers. Since this time, HOT-IT has sponsored two job-shadowing events where students from local DC area high schools visited various Federal agencies' IT offices. The team has also worked closely with the Industry Advisory Council's IT PACE (Partnership for Academic and Career Enhancement) Committee. The Council hopes to establish a pipeline of students from high school through college to a Federal career.

The HOT-IT Team's most recent Job Shadow Day in May 2001 was geared to students in DC high schools. Approximately 45 IT professionals from five Federal agencies volunteered to host the students. In June 2001, the IT Workforce Committee presented the students and their counselors with Certificates of Appreciation for their participation.

Future Job Shadow Days are being planned to include students from suburban Maryland and Virginia.

In addition to sponsoring shadow days and internships, the HOT-IT Team will initiate a formal partnership with the National Academy Foundation (NAF). In July 1999, the NAF launched a new Academy of Information Technology (AoIT). The program provides a curriculum for high school students and includes opportunities to partner with community colleges, universities, and businesses. The Committee assisted in the development of the curriculum for the AoIT. The Committee will develop a national Memorandum of Understanding (MOU) in FY2002 to frame and promote partnership efforts of Federal CIO Council agencies around the country with NAF AoITs. These partnerships will include job shadowing, summer internships, mentoring, and support of academy advisory boards.

4.4 Outreach and Recognition
Treasury continues to be recognized as a leader in federal IT workforce development. The current Program Manager and former Program Manager were asked to speak at several venues regarding the work of the Department and about Federal CIO Council initiatives. The former Program Manager is also the Government Task Manager for the NAPA Study on IT Compensation.

October 2001 – Organized and chaired Federal IT Workshop at the Industry Advisory Council's Executive Leadership Conference.

August 2001 – Organized and chaired a panel with NAPA, SRA International and the Administrative Office of the U.S. Courts at the OPM Strategic Compensation Conference

August 2001and April 2001– National Defense University class "Strategic Human Capital Management for IT Executives" - Guest lecture - presented Treasury and Federal CIO Council's IT workforce development activities.

July 2001 – 2001 Human Capital Summit on Recruitment and Retention for Government Agencies - presented a summary of the Federal CIO Council recruitment and retention initiatives.

June 2001 – FGIPC/IAC Conference - panel member with Gloria Parker (CIO, HUD) and Ira Hobbs (Deputy CIO, USDA) on the role of the non-IT exec and the IT project manager in CIO success.

May 2001 – FCW CIO Conference presentation on the IT Workforce Challenge and chaired an intergovernmental panel.

March 2001 – Treasury IT Conference – Chaired a panel discussion on E-Learning.

March 2001 – FOSE - Received Federal CIO Council award and Workforce Challenge Team Awards.

March 2001 – Fed Web 2001 Conference - co-presented on "Charting Your Career Course." This presentation provided a picture of both the federal and Treasury workforce, and highlighted Federal CIO Council initiatives for career development.

February 2001 – Justice Department CIO Executives - shared Treasury's approach on workforce development activities.

February 2001 – HR on the Horizon: 2001 Conference, Washington Chapter of the International Personnel Management Association Conference - participated in panel on "Creative Solutions to Recruiting, Retaining and Renting IT Talent."

January 2001- October 2001– Deputy Assistant Secretary for Human Resources and Government Task Manager, served on the Project Leadership Committee for the NAPA Study

November 2000 – Department of the Interior IT Conference - spoke as part of a Federal CIO Council Panel to over 1,000 people on Treasury and Federal CIO Council's IT workforce development activities

October 2000 – IPMA National Convention - presented Treasury and Federal CIO Council's IT workforce development activities, at the invitation of the OPM Associate Director for Compensation.

October 2000 – Performance Institute Symposium - presented Treasury's approach on workforce development activities.

September 2000 – IRMCO 2000 - participated in a workshop panel on workforce issues.

August 2000 – OPM Compensation Conference - spoke at a workshop on IT workforce issues.

July 2000 – National Academy Foundation Curriculum Review - represented the Federal CIO Council in meetings.

Chapter 5 – Nurture/Develop a Skilled Workforce

5.1 Introduction
The ITWIP Strategic Plan calls for nurturing and developing a skilled workforce by investigating new avenues of training that can result in economies of scale, and by continuing successful ongoing activities. The Department has made sustained progress in this arena as evidenced by the accomplishments below.

5.2 Achieving the 3% Investment in IT Career Development
In response to the 1999 Chief Information Officer's (CIO) report to the Secretary ("Responding to the Crisis in Information Technology Skills"), the Treasury CIO Council agreed to adopt the standard of investing a minimum of 3% of IT annual salaries in IT staff development. On May 12, 1999 the Assistant Secretary for Management issued a memorandum for bureau heads, chief financial officers, and chief information officers requesting that all bureaus increase their IT staff development investments.

Many of the Treasury bureaus have realized or exceeded the 3% minimum, some reporting investment as high as 4.1%. The bureaus that have not reached the 3% investment standard are planning increases in their annual training budgets to obtain this goal. One bureau reported that although it fell short of the 3% investment recommendation, no employees were denied technical training.

This investment in training is particularly important in technical areas since new technology is often introduced by the federal government. Studies have shown that higher training budgets result in better recruitment, higher retention rates, and a more satisfied and productive staff.

5.3 IRM College
Treasury continues to utilize the excellent IT management development program at DoD's University Information Resources Management (IRM) College. Historically, civilian agencies have had a limited participation in the IRM College. The interagency agreement between Treasury and DoD not only allows Treasury bureaus to participate in this training, but to also participate at reduced rates. Reviews from participants are consistently high, as reflected in the increasing enrollment.

There are two components to this program: the semester long Advanced Management Program (AMP); and several week long Intensive Classes on topics such as Business Process Reengineering, IRM Policy, Information Security, and Acquisition Reform that are directly related to significant CIO business and mission issues. Each component offers the opportunity to obtain a DoD CIO Certificate (based on Federal CIO Council core competencies) and graduate school credit.

For school years 2000, 2001 and 2002, Treasury has been able to place six students per year in the AMP program. Participating bureaus include: ATF, Customs, Departmental CIO, FMS, IRS, and USSS. In addition, enrollment in the intensive classes rose significantly each year. In school year 2000, 83 classes were taken, in 2001, 274 classes

were taken and 325 courses have been scheduled for school year 2002. Participating bureaus include: ATF, BEP, Customs, Departmental CIO, FinCEN, FLETC, FMS, IRS, Mint, OTS, OCC and USSS.

5.4 Information Management Forum
The Information Management Forum (IMF) is an international discussion forum that provides opportunities for executives and senior managers in both private and public sectors to exchange ideas on strategic and tactical issues. In September 2001, Treasury joined IMF's Human Resources Forum. This forum hosts quarterly conferences to discuss work-life initiatives. The conferences are two to three days in length and are held in major cities in the United States and Canada. Treasury's membership allows the bureaus to attend these sessions at no charge but are responsible only for the travel cost. During the two years since Treasury joined the IMF, our overall attendance has quadrupled and bureau participation has doubled. Additionally several Treasury employees presented at a number of IMF sessions.

5.5 Distance Learning
During FY01, the ITWIP Program Manager partnered with the IRS School of Information Technology to allow all Treasury bureaus access to the training classes off its web site at no cost to the trainee. This program offers over 600 classes in topics that range from technical IT training to soft skills. By the fourth quarter of FY2001, most bureaus were able to take advantage of this method of training. The bureaus that were able to participate reported satisfaction with the system and are interested in continuing to participate. The IRS is constructing a plan to allow bureaus to pay a flat fee for participants in FY2002, since IRS paid for the entire cost of the courseware.

Additionally, FLETC developed an E Learning system for the law enforcement community. Customs is piloting its own e-learning program with FLETC; and also plans to access the IRS site to supplement the program.

5.6 Treasury Executive Institute (TEI)
As a part of the Department of the Treasury, the TEI provides continuing learning for senior executives.   The programs are usually 3 - 4 hours in length and have an audience from 40 - 100 senior executives and senior managers. TEI's goal is to bring Treasury executives to the marketplace of ideas - to broaden their knowledge, challenge them intellectually, and sharpen their skills.

The IT Workforce Improvement Program partnered with TEI to put on a number of IT related sessions. A seminar on Knowledge Management was presented in July 2000 featuring a well-known private sector author and Federal government presenters from within and outside of Treasury. A pilot three-day class "IT for Non-IT Executives" was held in September 2000. The session covered a full range of topics such as improvement of opportunities for mission delivery, better definition of business outcomes and business cases, and ensuring effective delivery of IT projects throughout the life cycle. Approximately 25 Treasury and bureau employees attended each day.

5.7 Project Management Training - ESI International
ESI International offers certification programs in both Project Management and Information Technology Project Management, in addition to a curriculum in Contract Management. Since IRS revised its contract with ESI-International to include all Treasury bureaus, several bureaus have taken advantage of the significant discounts provided in the contract. Customs, BPD, BEP and most notably the IRS made substantial use of the contract and saved thousands of dollars in tuition and travel costs. During FY 2001, over 1,200 training slots were purchased for IRS and the bureaus. Thirty-five on-site classes were held, and employees attended publicly offered classes in the Washington DC area, Dallas, Atlanta, Dayton, Detroit, Phoenix, Denver, and New York City. ATF also used ESI International to provide training through the Treasury Acquisition Institute in Managing Information Technology, Cost and Scheduling and Project Leadership Management and Communication. Several employees are pursuing the Project Management Certification

Under the terms of the contract, Treasury employees are afforded a 30% discount off the published rates of ESI International's publicly held courses. To hold a Treasury-only course at a Treasury site, the contract allows for an even greater discount off of the public rates.

5.8 Other Project Management Training Initiatives
The bureaus also utilized the Treasury Acquisition Institute (also offering ESI classes), the IRM College at National Defense University (NDU), Northern Virginia Community College, and other outside vendors to meet the demand for Project Management training. OCC is currently piloting an internal software program that incorporates project management principles and is evaluating this tool to develop future project management training. FLETC also sponsored training in Microsoft Project software.

5.9 Other Bureau Training Initiatives
ATF provided Windows 2000 server and client administration training to computer specialists located in the ATF field divisions. Information Systems Division (ISD) managers and supervisors also participated in ATF-sponsored leadership programs.

ATF Pay Demonstration Program (See Chapter 6 for a full description of the project) – ATF began developing a five-year training plan in June 2000 in support of the pay demonstration project. It also developed a five-year training plan for employees who elected not to participate in the project.

The five-year plan has a number of goals. First, the plan will help meet the unique occupational needs for each of ATF's ISD branches. Second, it will provide occupational training that is required throughout the division. For example, ISD identified training such as Project Management, Contracting Officer Technical Representative (COTR) Training, and Windows 2000. Third, it will help employees develop the skills necessary to move from level one (GS-9) to level three (GS-13/14). This plan includes all Telecommunications and Computer Specialists within ISD.

To date, all the ISD Project Managers have completed COTR training. A majority of the IT employees have completed Project Management training and Windows 2000 software applications. All IT employees attended at least two courses in either data base, oracle, Tivoli, Telecommunication, Network, Cisco and/or other advanced technology training. Furthermore, a Pay Demonstration Bonus Incentive Program was established for employees that obtained the following certifications: Tivoli Professional, Help Desk Professional, Microsoft, Cisco, Project Management, Oracle, Internet Webmaster, Systems Security, Systems Administration, and Chief Information Officer (CIO). An employee can receive a bonus that is equivalent to 2% of his/her salary with the certification.

BPD's Human Resources organization began an initiative to identify useful training for program offices. To accomplish this, HR formed focus groups to identify training classes to meet the needs of the various organizations. These focus groups include Accounting, Analysis, Information Technology, Customer Service, and Management.

Customs initiated its own E-Learning center with approximately 800 courses for study during the pilot phase. Employees are currently providing feedback on their e-learning experiences. Customs also provided 44 employees with Software Engineering Institute (SEI) Capability Maturity Model (CMM) Level 2 training. Training in the Lotus Notes electronic mail platform was provided to approximately 3,000 employees in the metropolitan D.C. area. After a Customs-wide call for training input, many IT offices requested classes in Briefing Techniques and in Effective Communications. As a result, three classes in Briefing Techniques and one class in Effective Communications are being offered to employees in the Washington D.C. metropolitan area. Customs also provided an on-site course in Effective Business Writing for IT employees.

The FLETC devoted its training budget to technical training in preparation for the migration to Microsoft Office 2000 and Windows 2000. The FLETC participated in the Intensive Course curriculum at the IRM College, and sent participants to various seminars and symposiums.

FMS participated in both the AMP and Intensive course programs at the IRM College, and continues to offer Microsoft Office Suite training.

IRS provided 176,000 hours of technical training through an Interagency agreement with the USDA for both classroom and E-learning delivery to close to 5,000 IT employees. Over 25,000 hours of high-quality classroom and web-based project management training was provided in 900 training events to IT students. The IRS School of IT delivered 137,000 hours of end-user training through its Austin campus, utilizing CBT, text and web-based training, CD ROM's, and coached self-study. Over 40,000 hours of training was held to support the Service Center Mainframe Consolidation effort. The Human Resource Investment Fund provided 164 IT employees with 284 enrichment and career enhancement training events.

The Mint provided training on PeopleSoft 7.0 and the 7.5 Upgrade, Maximo 4.0 Upgrade and ADCS. Having Subject Matter Experts (SMEs) present with a trainer during the training proved very effective in delivering training on U.S. Mint-specific processes. The Mint also provided end user training in Microsoft Office 95, and the upgrade to Microsoft Office 2000. The CIO/Office of Business Alignment/IT Training is currently testing the Treasury School of Information Technology/IRS internet site in Austin, Texas. The Mint has also begun tracking IT employee-training history via the Training Administrative Database (TAD).

OTS launched its Professional Development Program in 2001 to encourage and support the individual professional development of all employees. OTS employees review individual goals with their managers and prepare Individual Development Plans (IDPs) to meet these goals. All managers participate in the IDP process and include activities to enhance their skills in their plans. In late 2001, OTS plans to implement an 18-month first-line management development program.

OTS includes computer skills in its Individual Development Plan (IDP) assessment factors. If an employee or manager identifies a need in this area, development activities are included in the plan. The employee may receive training via a class, CD, or Internet source. OTS requires examination staff and managers to attend the 3-day Technology Risk Controls class designed to increase their skill in assessing the technology risks of the institutions it regulates.

USSS provided training for Windows 2000 Professional and Windows 2000 Server for the IT staff. The IT staff is also encouraged to obtain industry certification. To date approximately 15% of the IT staff has completed the training required for technical certification. USSS participated in both the AMP and the Intensive course curriculum at the IRM College.

5.10 Management and Professional Training

CIO University - The CIO University program, initiated by the General Services Administration (GSA), was developed through an extensive effort to convert the Federal CIO core competencies into specific learning objectives which could be taught through a formal curriculum of study. The IT Workforce Improvement Program staff participated in focus groups which established these objectives. Treasury's work on Senior IT Management competencies was also used in GSA's program development process. GSA contracted with four universities (Carnegie Mellon University, George Mason University, George Washington University and the University of Maryland University College) to offer this curriculum. Those who complete the programs can attain substantial graduate level credit, the important credential of a "CIO Certificate," and broad grounding over the full range of technical/professional qualifications needed by a Federal CIO.

USSS participated in the CIO University in FY01, and plans to participate again in FY02.

STAR (Strategic and Tactical Advocates for Results) - GSA's STAR program replaces the "Trail Boss" program which was GSA's premiere program for senior IT acquisition leadership. STAR recognizes the increased complexity of the federal arena "...where operational functions are outsourced and agency business objectives and outcomes are key." It focuses on developing leaders with a broad range of program and project management, leadership, security, technology and government-specific skills. This approach is highly consistent with Department findings in its 1999 study of senior IT management competencies. Because of the STAR program's broad focus, GSA offers it to IT and non-IT leaders government-wide. ATF, BEP, BPD, Customs and USSS participated in the STAR program in FY2000 and FY2001.

In House Programs - ATF, Customs, Departmental Offices, IRS, and USSS have developed internal leadership programs including first-line supervisory training, mid-level supervisory training, and leadership classes that focus on self-awareness, interpersonal competence, group leadership, organizational dynamics and environmental impacts.

In addition, Customs sent employees to the Federal Executive Institute's (FEI) Leadership Program in Charlottesville, VA, the Senior Executive Fellows Program at Harvard, the Customs Manager's Leadership course and to the Customs Leadership Institute in partnership with Columbia University Graduate School of Business. Customs also initiated a Structured Management Orientation Program in January 2001 to provide an overview of Customs' operations in the field.

Treasury's Chief Information Officer initiated an Executive Potential Program (EPP) in his immediate organization. The EPP is a pilot program operating under the direction of the Treasury's Deputy Assistant Secretary, (Information Systems) and CIO, in Washington, DC, with guidance from Treasury's Deputy Assistant Secretary (Human Resources). Candidates are nominated by CIO senior managers and should have demonstrated exceptional leadership/executive potential. Selection is made through merit competition. The EPP is competency-based and provides training and developmental experiences for high potential individuals, (GS-14 to 15). The program may require up to 18 months to complete and prepares participants for leadership positions in the Federal government and Treasury's CIO organization, in particular.

This program was designed primarily for IT specialists who are either transitioning into executive leadership roles or are already managers within the CIO organization. The program was designed to ensure a continuing source of individuals who are prepared to assume more responsible leadership positions.

Treasury's CIO plans to implement another management development program in FY 2002. The MPP will be a mid-level management development program opened to CIO staff with little or no management experience. The MPP will provide career planning, training and developmental experiences for high potential individuals, (GS 12-14). The program will require up to one year to complete and helps to prepare participants for management positions both in the federal government and Treasury's CIO organization.

The program was designed to ensure a continuing source of individuals who are prepared to assume more responsible management positions.

IRS has an IT Management Career Development Program (MCDP). It is a twelve-month program targeted at highly motivated employees who have demonstrated leadership potential and are committed to becoming future managers in the IT organization. MCDP offers comprehensive, competency-based training, developmental opportunities, mentoring, and coaching to prepare candidates for entry-level management. The primary focus is on leadership skills, technical competencies, administrative management, human resources, and organizational knowledge. Training curricula have been enhanced to include Clinger-Cohen Core Competencies for IT leaders.

The IRS' Executive Readiness Program (ERP) comprises a one to two year program which offers a variety of training and experiential opportunities to candidates who wish to pursue an executive career and who are competitively selected for the program. For IT program participants, ERP comprises two elements: a service -wide program for all participants focused on the 21 competencies in the IRS Leadership Model; and an adjunct program within the organization focused on its specific needs and its candidates, including an emphasis in developing participants' Clinger-Cohen Core Competencies.

Chapter 6 – Provide a Desirable Work Environment

6.1 Accomplishments
Significant progress was made government-wide this year in reforming the IT occupation. The Office of Personnel Management, in close cooperation with the Federal CIO Council's IT Workforce Committee and the Human Resources Management Council, issued the new GS-2210 Classification standard in June 2001, as the first in the newly created GS-2200 Job Family. This new standard is more versatile than its predecessor; more accurately descriptive of IT work; and can be readily adapted to reflect changes in technology.

In addition, OPM established special salary rates effective in January 2001, for GS-334 Computer Specialists in grades GS-5 through GS-12. This action raised the salary of over 33,000 federal workers. The increase to Treasury amounted to 11.4 million dollars.

Specifically at Treasury, more progress was made in providing a desirable work environment to employees. The US Mint was recognized in The Washingtonian Magazine (October 2001) as one of "seven great agencies" to work in and cites the Mint as "one of the most progressive, employee-friendly federal workplaces."

ATF, BPD, Customs, FLETC, FMS, OCC, and USSS are using retention bonuses in a limited basis for employees with special skills or key personnel. The IRS paid retention allowances to sixteen employees in the Office of Security, Evaluation and Oversight. The employees in this office possessed a cross-section of skills in all areas of security, as well as in disaster recovery and telecommunications and had an in-depth knowledge of the IRS' systems infrastructure. During this timeframe, many government and private sector agencies were recruiting for these skills. In July 2001, a retention allowance was initiated for three employees in the Office of Cyber Security to maintain critical security capabilities.

In addition to the standard Federal benefits package, bureaus offered the following incentives and benefits to retain the current workforce:

- Participation in the Public Transportation Incentive Program {by Executive Order}
- Cash awards and time-off awards/alternate work schedules {most}
- Employee Assistance Program and training, e.g., stress reduction {most}
- Free parking at the field locations {many}
- Professional Development Program {many}
- Telecommuting/flexiplace {BPD, Customs, IRS, OCC, OTS, TIGTA, USSS}
- On-site day care program and/or child care assistance {ATF, BPD, Customs, IRS}
- Health enhancement and improvement programs, e.g., nutrition and dieting and annual blood screening profiles {ATF, BPD, Customs, OTS}
- On-site fitness center {Customs, IRS}
- Facilities upgrades {BEP, FLETC}
- On-site credit union {Customs, IRS, DO}

- Flexible Spending Accounts (FSA) program allows employees the opportunity to pay out-of-pocket health and dependent care expenses with tax-free dollars {OTS}
- Seated massage offerings – employee pays fee {Customs}
- A $300 Federal Employees Health Benefits premium subsidy {OTS}
- A separate life insurance program that includes coverage for Domestic Partnerships, which is offered in addition to the FEGLI program {OTS}
- A Long-term Disability Program {OTS}
- A Business Travel Accident program {OTS}
- Enhanced Thrift Saving Plan benefits under a private sector policy with an additional two percent employer match {OTS}
- Enhanced Family Friendly leave benefits {OTS}
- Life cycle referral services provide employees with education and referrals to help address day-to-day responsibilities and major life events involving their families, health, education, finances, and careers {OTS}

Please note: The Financial Institutions Reform, Recovery and Enforcement Act of 1989(FIRREA) grants the Directors of OTS and OCC full discretion to set pay and benefits notwithstanding the provisions of law governing other federal employees.

ATF Pay Demonstration Project - The ATF Demonstration Project was implemented on January 16, 2000, with 255 employees (out of 288 eligible) electing to participate. There are currently 284 participants. Since its inception, the Demonstration Project has hired 21 new employees and has lost 7 employees through attrition (retirement, resignation, and reassignment).

The ATF pay demonstration project includes a pay-banding scheme and pay-for-performance incentives that allow new employees to start at higher salary levels, and high-performing employees to accelerate in pay faster than the OPM General Schedule.

In January 2001, the Demonstration Project achieved its first successful pay for performance pay-out to eligible employees. Performance pay-outs are based upon an assigned performance rating with an affixed pay-out percentage and were applied to an employee's base salary. Employees received an average 4.5% increase to their base salary, in additional to the locality and general increase. Other incentives used to attract and retain employees under the Demonstration Project include use of nine certification and licensures bonuses, four recruitment bonuses, three education supplements, one retention allowance, and one relocation bonus.

ATF conducted an interim evaluation of the Demonstration Project on March 28, 2001, performed by Booz-Allen, Hamilton. It indicated that significantly more demonstration employees were in favor of the Demonstration Project than at baseline (63% v. 20%). Most employees said they were better off financially in the Project. Preliminary data indicate managers are able to attract more qualified candidates and there has been an increase in the percentage of minimally qualified applicants per vacancy.

Anecdotal evidence suggests that the higher salaries under pay banding and other human resources interventions are attractive to applicants. The use of the category rating system, grouping applicants by two or more quality levels (as opposed to assigning individual numerical scores) to rate and rank external applicants has increased. Administrators believe this is a more efficient process that will decrease processing time and increase the number of applicants referred to supervisors.

Managers in the Demonstration Project use more flexible entry salaries. Salaries for lower level employees were considerably higher than in the comparison group. Employees are clearly seeing the link between pay increases and individual and organizational performance (i.e., my pay raises depend on my contribution to the organization's mission, my pay raises depend on how well I perform).

ATF has been noted for it's unique human resource programs available to all employees. These programs include: Pay Demonstration Project, Peer Support, Chaplaincy, Employee Assistance Program (EAP), Health Improvement Program (HIP), and Ombuds programs. ATF considers these programs vital to the health and well being of the organization and that this will contribute to better IT retention in the future.

BEP is continuing to renovate office and test lab space, and to purchase new furniture for its IT personnel.

BPD has an Employee Welfare and Recreation Association.

Customs initiated a Tuition Program in FY 2000. Since its inception, the Program has provided tuition assistance for 32 information technology employees at a college or university of their choice.

At *IRS*, the Modernization and Information Technology Services Flexiplace/Hoteling Pilot successfully demonstrated that remote work has a significant positive effect on employee satisfaction (which in turn positively impacts customer satisfaction and business results), can be an effective recruitment/retention strategy, and optimizes use of existing space. The pilot evaluation report is being widely utilized as a case study by private and public sector organizations, including Departmental Offices, GSA, and OPM. The IRS Systems Development function is proceeding with a flexiplace prototype consisting of up to 35 programmers who will have remote access to the IRS network. A flexiplace web-site was developed to guide other IT functions in offering flexiplace opportunities to employees.

TIGTA is paying retention allowances to 21% of its IT employees. It also has an organization-wide telecommuting effort that has over 70% participation.

USSS organized a Quality of Life working group designed to improve performance and morale throughout the workforce.

6.2 Federal Student Loan Repayment Program

OPM issued final regulations authorizing federal agencies to repay student loans as a recruitment or retention incentive for candidates and current employees. As a recruitment tool, agencies can offer student loan repayments once they have made an offer of employment. As a retention tool, loan repayments can be made to current employees as one of many incentives designed to keep talented employees in the Federal workforce. Using the authority, agencies can tailor loan repayment programs to meet specific resource needs. Agencies may repay up to $6,000 per year per individual for a maximum of $40,000.

The Treasury Deputy Assistant Secretary for Human Resources issued flexible guidelines for implementation of the Federal Student Loan Repayment Program in October 2001. Each bureau is delegated the authority to establish a plan and associated procedures for implementation of the program. While it is too early to gauge the effectiveness of this program, we are hopeful that this recruitment tool will be effective in attracting talented individuals to Treasury IT positions.

6.3 Employee Benefit Package

The IT Workforce Improvement Program plans to utilize the results of the NAPA study in conjunction with an inventory of agency best practices to produce a guideline to bureaus on the use of various recruitment, retention and development flexibilities. This Employee Benefit Package will provide a useful compendium to use in marketing IT jobs and opportunities.

Chapter 7 – Attract New Talent

7.1 Bureau Recruitment Initiatives

Many bureaus have participated in college career fairs, and several bureaus have participated in intern and other bureau specific programs to provide IT experiences in the federal government to skilled college students. We highlighted the more significant efforts below.

BPD's Office of Information Technology (OIT actively recruited for skilled computer specialists. Representatives from OIT attended several College career fairs to advertise their jobs and skills needed. OIT was very proactive in the Student Career Experience Program (SCEP) which allows Computer Science majors to attend school, obtain training, and gain work experience concurrently. In a little over a year, nine Computer Science students from five colleges were recruited through the SCEP. Participating educational facilities included were: West Virginia University, Ohio University, Marshall University, Shepherd College, and Virginia Tech. The SCEP program will afford Public Debt the opportunity to convert well trained and experienced individuals to full time positions upon graduation, and help Public Debt to avoid a shortage of skilled IT workers in coming years.

Customs and *USSS* used recruitment bonuses to bring talented individuals into the organization.

IRS conducted limited external recruitment and substantial internal recruitment. Eighty candidates were selected from external sources, both public and private sector. IRS continues to have a significant number of applicants for entry-level positions and high quality candidates for journey or above positions. One hundred and eighty four candidates were selected or promoted internally in the Modernization and Technology Services organization. Only vacancies created by attrition, however, were filled through external hiring. IRS utilizes an internal feeder pool as its primary source of candidates.

The Mint has also taken an active role in recruitment. The bureau began a study to identify the recruiting sources for all new employees hired at the US Mint headquarters in FY 2000 and 2001 in order to determine where recruiting dollars should be targeted.

The Mint also participated in OPM's IT Pilot study. The study ended in July 2001, but pilot agencies were permitted to continue until December 2001. The IT Pilot utilizes the competency-based approach to qualifications. This approach replaces the current quantitative method of assessing qualifications with one that allows a whole person assessment in order to hire the right person for the right job. Mint filled six positions under the IT Pilot, including several IT security positions which are extremely difficult to fill, especially in the federal sector. Additionally, progress was made under the Pilot to reduce the amount of time it takes to fill IT positions. OPM is expected to provide government-wide results on the IT Pilot study in early 2002. The Mint is one of the leaders in the development of a competency-based system that establishes both general and technical competencies for every GS occupation at the agency.

In a continuing effort to streamline and automate the hiring process and to hire IT professionals faster and more efficiently, the Mint contracted with a new application service provider, Quickhire, launching the new system in June 2001. This system allows the bureau to build and post vacancies directly to its web-site and to USAJOBS. Individuals who are interested in employment opportunities at the Mint can review vacancies and apply online. The next phase of this project will involve the use of competencies and applicant self-assessment which will facilitate automation of the rating and ranking process.

The Office of Human Resources' (OHR) employment portal on the Mint's main web-site is being redesigned to serve as an informative, captivating, and cutting edge web-site including a special "Hot Tech Jobs" micro-site appealing to IT Professionals and informing them of current openings and accomplishments in the IT arena. And, in coordination with the re-design of the OHR web-site, the Mint has created an employee branding concept which is reflected in employment advertising and all outreach programs including new recruitment brochures and hand-outs for external recruitment activities.

In the fall of 2001, the Mint identified top and mid tier schools in the MIS and computer engineering fields that are geographically close to its facilities to participate in career fairs. OHR hopes to use hiring managers as part of the recruitment outreach program deployed at these schools. In addition, OHR outlined diversity initiatives that target recruitment at job fairs where minority populations are represented and is exploring partnerships with two organizations that recruit and place persons with disabilities. Outreach to minority organizations is in place and is ongoing.

The Mint is currently designing a corporate-wide instrument New Employee Orientation Handbook Folder that may be tailored for each location and is designed to provide a more modern and higher quality information source for new employees. The bureau is also designing a web-enabled exit interview program to assess why employees leave the US Mint.

7.2 Disabled Opportunity Program
In concert with an Executive Order that challenges federal agencies to increase the number of people with disabilities in the federal workforce during the next five years, the IT Workforce Improvement Program (ITWIP) launched a Treasury-wide initiative to hire disabled workers for our IT organizations. The Federal CIO Council's "Meeting the Federal IT Workforce Challenge Report", June 1999, states that "people with disabilities are yet another underemployed labor market and potential source for IT workers." ITWIP initiated its Disabled Opportunity Program in 2001 by providing Treasury bureau CIOs with information and a CD-ROM on the Department of Labor/DoD's Workforce Recruitment Program (WRP). The WRP provides data on pre-screened disabled applicants from post-secondary and graduate schools, for permanent and summer positions. BEP's CIO will be a recruiter for this program.

7.3 Pipeline for Talent
It is clear from our Treasury workforce statistics that new talent is only slowly trickling into the Department. The IT Workforce Improvement Program designed a Department-wide IT Professionals Program to serve as a vehicle to attract outstanding men and women to the Department; however, the program was not implemented due to lack of funding. The Program intended to target college students in a variety of majors, not just computer science and information systems majors, who demonstrated a high potential for leadership and management.

BPD developed an Information Technology Summer Temporary Employment Program that allows students to work for the summer and obtain additional marketable skills. Since the induction of this program in May 2000, Public Debt has recruited four students for summer employment.

The Mint CIO's office participated in a bureau-wide summer internship program. The Mint decided that development of a formal Career Intern Program was too complex at this time.

7.4 OPM's Federal Career Intern Program
OPM launched the Federal Career Intern Program (FCIP) in December created under Executive Order 13162. The program allows agencies to hire individuals for a variety of occupations at the GS-5 through GS-9 level through a less stringent hiring process. Individuals hired under this program will receive excepted-service appointments not to exceed two years, and must include a substantive training component designed and approved by the employing agency. Individuals who successfully complete the program are eligible for conversion to career or career-conditional appointments. To provide bureaus with as much flexibility as possible, the DASHR policy on this program is broad and provides for bureau discretion in implementation. Strategic use of the FCIP can be an effective tool for attracting high-quality IT talent to the Department.

7.5 Scholarship for Service
This program under the Federal Cyber Service Initiative addresses the need in the Federal government for more skilled professionals in information systems security and the need to establish a pipeline for recruitment of new professionals in an effort to promote a national commitment to information assurance. The SFS program was launched for the Fall 2001 semester in 6 institutions: Carnegie Mellon University, Iowa State University, Purdue University, University of Idaho, University of Tulsa, and the Naval Post Graduate School in Monterey, CA. The program provides scholarships to junior and senior undergraduates or master's degree students who include an emphasis in the field of information assurance in their studies. In return for the scholarship, students will serve up to a two-year commitment to work for the Federal government. The IT Workforce Improvement Program invited a representative from the Federal Cyber Service work group to brief the IT Skills Enhancement Subcommittee about this program.

7.6 Workforce Planning Studies or Skills Analyses
OPM is developing a systematic methodology and an automated system for workforce planning and analysis in order to provide Federal agencies with a single, integrated tool. This system should be in place by the end of FY 2002.

BEP will use the process of rewriting position descriptions and performance elements, due to the transition from the 334 series to the 2210 series, to perform a gap analysis to identify training needs.

At ***IRS***, an Integrated Workforce Planning Assessment was initiated in June 2001 and completed September 30 to determine and address human capital requirements of its IT organization (MITS). The goals of this assessment were to:

- Provide management with a comprehensive snapshot of the entire organizations' competency base;
- Determine the key roles and competencies that are likely to be lost through retirement or other attrition factors;
- Determine the competency requirements to accommodate future workloads; and
- Identify the key competency gaps and develop strategies to fill them.

The assessment consisted of three major activities:
1)   Interviews with all IT Heads of Office to gather information regarding future workforce requirements (e.g., strategic planning goals and objectives; competency, staffing and training needs; and recruiting objectives)
2)   An on-line "MITS Workforce Planning Competency Assessment," completed by all IT executives and managers, to baseline the current workforce composition
3)   Statistical analysis of regarding attrition, retirement, demographics, and other workforce-related data.

The assessment resulted in the FY 2002 MITS Workforce Plan which will be used to guide executive and management decisions on workforce composition, recruitment (internal and external), out-sourcing, and training and development efforts at the tactical level. IRS anticipates that implementation of the Workforce Plan will give it the ability to make resource recommendations on an enterprise-wide basis – that is, to have an effective strategy for aligning FTE's, salary, training, and other funds to meet corporate needs.

At ***OCC***, the CIO organization developed a skills survey for IT staff. OCC expects to conduct the survey in FY2002. OCC hopes that the survey will help to identify and resolve skill gaps to ensure that there will be a continuous stream of talented technology staff to meet OCC needs.

USSS initiated a Career Ladder Criteria working group to identify and standardize criteria needed to advance within the agency. The training coordinator is working with the Assistant Division Chiefs to assess core skill set requirements for most of the technical personnel on staff. The bureau already sees evidence of positive results from

this planning. In addition, USSS is synchronizing individuals, positions and individual training plans to ensure that it is properly training each employee for career growth as well as technical competence.

7.7 Temporary Hiring Strategies
To meet *OTS'* immediate need for staff with new technology development skills, software architects were hired under the Fellows program. The Fellows assist with the modernization of OTS legacy systems, mentor and train permanent staff, and address complex technology issues facing OTS. OTS has two Fellows on board providing assistance with short-term, mission-critical projects relating to software development and architecture. Candidates are given a minimum 13-month term appointment with full participation in the OTS and federal benefits programs. Appointments may be extended based on OTS' continued need. The Fellows program offers a cost-effective method for attracting highly qualified external talent for specialized short-term assignments.

Chapter 8 – Summary

Treasury has made significant progress in IT workforce improvement over the past few years. The IT Workforce Improvement Program Office will continue to plan programs which meet the needs of the bureaus and adds value by enabling economies of scale. Treasury will continue to investigate and develop shared training and development opportunities.

As Treasury moves closer in the next several years to an increase in retirements, and shifts take place in the nature and type of work done by IT organizations, there is a compelling need to focus more on workforce planning and analysis. This planning and analysis, along with the continuing move toward a competency-based approach to IT jobs, will allow for better definition of specific skills needed for the future.

The release of the NAPA study on IT compensation and benefit strategies will serve as an impetus for reform and legislation that will guide Treasury toward valuing and managing it's IT human capital successfully.

Treasury will continue to provide leadership in Treasury and the Federal community, nurture and develop a skilled workforce, provide a desirable work environment for IT employees, and attract new IT talent.

Treasury must position itself as an agency which has the right people with the right skills in the right locations to manage its IT resources in the most advantageous way to promote the mission and business of the Department.

ACKNOWLEDGMENTS